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(71)Applicant : MIYAKE SHOJIRO  
NISSAN MOTOR CO LTD

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(72)Inventor : MIYAKE SHOJIRO  
YASUDA YOSHITERU  
MABUCHI YUTAKA

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(54) SLIDING MEMBER WITH HARD CARBON FILM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a sliding

member with a hard carbon film excellent in low friction and low abrasion in a lubricating oil.

SOLUTION: This sliding member with a hard carbon film used in a lubricating oil is prepared by forming a hard carbon film 12 on a backing 11, wherein at least the surface layer of the film 12 contains 5-70 atm.% of at least one metal element selected from the group consisting of group IIb, III, IV, Va, VIa, VIIa and VIII elements in the periodic table.